These fact sheets contain brief descriptions of each recommendation along with some suggested implementation steps. Please see the "Summary of Recommendations" or "Full Recommendations Report for the complete listing of recommendations.

# A.1 Relieve Bottle necks through Traffic Management

A number of low-cost actions may have a beneficial impact on traffic flow:

- Making effective use of the new signal control system
- *Improving signage on alternative, less congested routes*
- Creating selective left-turn and parking restrictions

These actions can improve the current bottlenecks and are low-cost enough that they can be implemented on a trial basis in key southeast locations, and then evaluated.

#### **Implementation**

The primary agency for this work is BCDOT.

Steps for using the signal control system are discussed in the recommendations document and include:

- 1. Identify corridors where signal coordination would be beneficial. Examples include President, Washington, Orleans, Fayette Streets, Eastern Avenue, Fleet and Boston Streets.
- 2. Develop time-of-day specific and day-of-week specific signal timing plans, combined with coordination.
- 3. Develop plans to manage traffic peaks due to special events.
- 4. Dynamically manage the impacts of unplanned events.

Steps for the other improvements are shown in Table 1

Table 1 Steps for Location-Specific Improvements

Generic Step	Possible Actions	
	Improved Signage	Selective Restrictions
1. Determine where the	Identify congested corridors	Identify congested
problem exists.	(e.g., President)	intersections.
2. Determine whether the	Does an alternative,	Is it possible to relieve the
proposed solution is feasible	uncongested route exist? (e.g.,	congestion via left turn or
in that area.	Central to Fayette)	parking restrictions?
3. Are the tradeoffs	Does the alternative route go	Do motorists have reasonable
manageable?	through an area extremely	alternatives if left turns or
	sensitive to increased traffic?	parking become limited?
4. If the answers above are	Measure "before" volumes on	Measure "before" volumes
favorable, implement.	primary and alternate corridors	and delays
	Install signs	Install restrictions
5. Several months after	Measure "after" volumes on	Measure "after" volumes and
implementation, evaluate	primary and alternate corridors	delays

# A.2 Relieve Bottlenecks through Construction

Several activities, which require construction, can positively impact the current traffic flow and reduce bottlenecks that occur, and may produce significant changes to the network. These activities include

- Converting two-way streets to one-way street pairs as conditions indicate.
- Finalizing construction options to improve the network.
- Building infrastructure to support non-motorized transportation

For these actions, the expense and/or impacts are significant enough to warrant a careful analysis of potential impacts prior to undertaking the action.

## **Implementation**

- 1. Design and implement a stakeholder process to educate citizens about the benefits and tradeoffs associated with the proposed action, to ensure the support of an informed public.
- 2. Evaluate the traffic impacts of the proposed action, keeping in mind that a major increase in capacity will likely result in more traffic, both in the area being improved and in upstream and downstream areas <sup>1</sup>. For example, an expansion of Boston Street near Haven Street may result in more traffic on Fleet and Aliceanna, while reducing through traffic in O'Donnell Square. Reasons that traffic may increase include
  - The action enables more development
  - Traffic diverts to the improved area from other areas.
- 3. Given favorable public opinion and a favorable overall traffic impact, proceed with the action. Figure 1 shows some possible locations and actions.

Figure 1: Road Improvements



<sup>&</sup>lt;sup>1</sup> The significance of the proposed action will determine the level of detail required in the traffic impact evaluation. A longer left turn lane requires little evaluation. A major improvement (such as a viaduct) calls for a more detailed evaluation that uses the regional travel demand model to consider the impact of future development, downstream traffic and the Red Line. Given the substantial uncertainty in both future development and transit improvements, it is currently difficult to determine the exact amount of capacity expansion that will be required.

# A.3.a Improve Use of Existing Off Street Parking Spaces

Even though resident parking demand is high during the evening and overnight hours, and visitor parking demand is high during the evening, many off-street spaces are underutilized during these time periods. These spaces may include:

- Those belonging to institutions (offices, churches)
- Public parking areas (garages)
- Other publicly owned spaces (e.g., at public schools)

Similarly, during the day, demand for parking spaces for business/retail use is high, while residential demand is lower. This recommendation is aimed at increasing the available supply of parking, by encouraging it to be shared by multiple types of users. The benefit is a more efficient utilization of existing off-street parking spaces and a reduced need for costly construction of new spaces.

#### **Implementation**

The lead agency is the Parking Authority. Implementation would involve a combination of three mechanisms:

- a. Opening public parking areas to multiple uses. For example, a parking garage that is used for employee parking during the day could be used for resident parking at night.
- b. Encouraging adjacent landowners to share parking, under private arrangements.
- c. Establishing parking management districts that allow parking to be shared among multiple landowners.

Implementation steps include the following:

- 1. Identify and remove significant legal obstacles to the sharing of parking. Address:
  - Significant liability issues: What is the liability exposure of business A if resident B has a mishap while parking in business A's lot?
  - Zoning constraints: If a church is in an area zoned residential, would it be a non-conforming use for employees of a nearby business to use the church parking lot?
- 2. Create incentives in the special permit process to encourage shared parking.
- 3. Determine a target area. The ideal area has:
  - A variety of land uses with different peak periods for parking.
  - A shortage of parking, for at least one group of users at one time period.
- 4. Consider the three mechanisms (a,b,c) outlined above, implement the best strategy or strategies for the target area. Strategy (a) makes sense when a public parking area is available, but underutilized during a period of peak demand. Strategy (b) makes sense for small areas, where adjacent landowners can easily be identified. Strategy (c) makes sense for a commercial district that has multiple landowners and parking lots.

# A.3.b Increase On-street Parking Supply Selectively via Angle Conversions

- Several streets in the southeast have multiple travel lanes but carry traffic volumes far below capacity. One travel lane can be combined with the current parallel parking lane and converted into an angle-parking lane with more spaces. Benefits will include:
  - An increase in the number of spaces of 10-100 percent, depending on the width of the street and the angle chosen, and
  - A possible reduction in traffic speed, resulting from the removal of a travel lane. (The remaining lane will be running closer to capacity, and opportunities for passing are reduced or eliminated; therefore it can be expected that motorist speeds will decrease.)

#### **Implementation**

The lead agency is BCDOT. Implementation steps include the following:

- 1. Evaluate streets that have been identified by the community (it is assumed that a neighborhood will initiate a request for angle parking, in response to a perceived parking shortage and/or need for traffic calming). The evaluation will include
  - Street width. Is angle parking feasible? What angle should be used?
  - Traffic volumes. With high traffic volumes, forward angle parking may lead to a substantial increase in crashes, because drivers who are leaving parking spaces have severely limited visibility. A possible workaround for this issue is to use reverse angle parking, where drivers are expected to back into a space.
  - Future traffic volumes. It may be inappropriate to reduce the number of lanes on a street that is anticipated to carry far more traffic in the future. BCDOT policy already avoids angle conversions on arterials.
- 2. In cases where angle parking is feasible and appropriate, communicate the plan to local residents, and implement.

# B.1.a.1 Unify & expand workplace-based transportation demand management (TDM) options

Transportation demand management (TDM) refers to a set of strategies to reduce demand placed on the transportation system. A unified and expanded workplace-based TDM program can provide tangible benefits for the City and its constituents, including residents, businesses, and commuters in the southeast. Effective workplace-based TDM can play a crucial role in reducing traffic, improving traffic flow, and improving air quality. It can save parking costs for employers and offer commuters less costly and less stressful commutes. For maximum benefit, the City needs to coordinate closely workplace-based and community-based/resident-focused TDM options.

#### **Implementation**

The lead agency would be BCDOT, specifically, the Planning and Public Information staffs. Steps include the following:

- 1. Increase BCDOT staffing to manage a unified TDM program, by hiring or reassigning at least one additional full-time staff person. Although a number of TDM initiatives are currently available in Baltimore, the City's ability to coordinate, expand, and promote the options is severely limited.
- 2. Use the additional professional capacity to increase coordination among the various agencies and private partnerships that offer TDM services. The City can provide a unified outreach and marketing front for all TDM options.
- 3. Institute workplace-based incentives to reduce peak-period single-occupancy-vehicle trips. Possibilities vary, and include:
  - Expand the existing ride-sharing program to provide opportunities for people to experiment with commuting by transit without losing existing parking privileges.
  - Work with the business community to institute shuttles.
  - Provide incentives to developers who agree to put into place and enforce TDM programs for their commercial tenants.
  - Encourage alternative work schedules or telecommute options.

The costs of these programs vary and can be borne by the City, by developers as part of, for instance, an incentive program that offers increased development permitting to those who agree to implement programs, or by employees.

- 4. As appropriate, further integrate workplace-based incentives and resident-focused TDM initiatives such as car sharing (see relevant Fact Sheet).
- 5. Increase education, marketing, and incentive programs to promote TDM.
  - *Quick win*: Publicize the Federal and State tax benefits available for transit pass purchase.
  - Create a website for TDM in Baltimore with links to all the components. The Rideshare website is a good start but could be expanded and more prominently displayed.
  - Publish and distribute a simple brochure for employers or commuters, emphasizing the range of options available in Baltimore.
  - Hire a part-time intern as an economical way to increase outreach and follow-up with individual employers in the southeast.

# **B.1.a.2** Support the Establishment of Transportation Management Associations and Establish a Trip Reduction Ordinance

Transportation Management Associations (TMAs) are non-profit organizations formed by groups of adjacent businesses to manage (and sponsor) local TDM efforts, including running shuttles and working with the transit agency to improve service as needed. Trip reduction ordinances (TROs) offer a legislative approach to enforcing reductions in single-occupancy vehicle trips, by requiring employers to create and abide by trip reduction plans. Both offer important benefits to strengthen a unified and expanded workplace-based TDM program (see relevant Fact Sheet) and should be coordinated with City-sponsored TDM efforts.

#### **Implementation**

The lead agency for both TMA and TRO implementation would be BCDOT, specifically, the Planning and Public Information staffs.

Steps for TMAs include the following:

- 1. Identify key areas where TMAs could make a significant impact. These are areas with high densities of employment (and/or customers and visitors) and existing congestion issues. Fells Point, Johns Hopkins, and the O'Donnell Square--Boston Street waterfront—Canton Crossing area are likely candidates.
- 2. Contact business associations in these areas to promote the benefits. These are likely to include:
  - Improved commutes for business owners and employees.
  - If shuttles are provided and advertised, increased customer visits.
  - Reduced spending on providing parking for employees and visitors.
  - A unified group to work with the MTA to improve transit service to the area.
- 3. Refer to existing Baltimore TMAs for city-specific advice. The Downtown Partnership is a good place to start. Also see the Policy Tools paper for a discussion of successful TMAs in other cities (e.g. Boston).

*Steps for TROs include the following:* 

- 1. Refer to the Policy Tools paper for an overview of the TRO programs of several jurisdictions, including Santa Monica, CA and Montgomery County, MD.
- 2. Contact staff involved with other cities' TRO efforts to find out more about their successes
- 3. Consider how application in Baltimore might be appropriate. Issues to consider:
  - a. Can a politically-feasible program be developed and the legislation passed? Baltimore should prepare a program that meets its needs. Basic TROs need not be onerous. For instance, a requirement to provide information sessions about alternative commuting options would be a good start.
  - b. Can the City's TDM staff support businesses that need assistance developing their trip reduction plans?
  - c. Can the City enforce the regulation?

TROs do not have to be heavy-handed. In fact, they offer individual businesses the opportunity to propose creative and unique solutions that are most appropriate for that business's needs and impacts, avoiding wasted or overblown efforts.

# B.1.b.1 Expand & Strengthen the Residential Parking Permit Program

Residential Parking Permit (RPP) programs are used in a number of neighborhoods in Baltimore (including areas in the southeast) to reserve long-term use of on-street spaces for local residents. Expanding the program to more neighborhoods, especially those near commercial districts, will preserve parking options for residents while strengthening the effectiveness of the City's actions to increase business customer utilization of off-street parking. In addition, changing the pricing structure for RPP permits can complement other efforts to decrease auto ownership in Baltimore and can provide a "fairer" allocation of scarce spaces.

## **Implementation**

The lead agency for both expanding and re-pricing RPP would be the Parking Authority.

Steps to expanding the RPP program to more neighborhoods include:

- 1. Determine where to institute RPP. Where is spillover a problem, and where is that problem likely to grow? Consult neighborhood groups—do they feel that RPP is needed or desired in their area? Parking is a localized issue and responses will vary.
- 2. Although starting with resident perceptions helps, hard data will be necessary. If the City raises the rates for on-street parking in commercial areas, it may then be necessary to add RPP in surrounding residential areas, so that the desired effect (increased business customer use of off-street garages) is achieved, rather than the undesired effect (spillover of business parking into residential areas). A parking study may be useful. Any study should be carefully planned with the Parking Authority and BCDOT to make sure that it addresses any other parking data needs as well.
- 3. Work with neighborhood groups to make sure they are "on board" with planned RPP expansions or at least understand their necessity.
- 4. Implement RPP in the affected neighborhood.

Steps to restructuring the pricing of RPP include:

- 1. Review RPP decal sales records to reveal how many multi-vehicle households are currently using on-street parking in each neighborhood. Variations among neighborhoods are important and each area will continue to require a slightly different strategy.
- 2. Where appropriate, consider the following two types of restructuring to encourage reduced levels of auto ownership and to increase residential parking equity:
- Change the pricing of residential parking decals so that second (and subsequent, if allowed) stickers are significantly more expensive than the first,
- Expand to more neighborhoods the policy of limiting RPP decals more strictly for households with access to on-site off-street parking, or of pricing decals higher for these households.
- 3. Contact other cities, such as Alexandria, VA and Toronto, ON, that have instituted these policies (see full recommendations document, p. 33).
- 4. Work with neighborhood groups to explain why proposed changes are necessary and how they will increase the ability of many households to find a spot.
- 5. Implement the changes.

# **B.1.b.2** Car Sharing

A successful car-sharing program will reduce parking shortages and congestion in the southeast. It will encourage residents to be less reliant on a car by still offering them the flexibility of access to personal transportation when needed. By making driving a "pay-as-you-go" proposition without a large initial investment, car sharing is likely to decrease vehicle miles traveled, reduce congestion, improve air quality, and save residents money.

# **Implementation**

The primary agency for this work is BCDOT, specifically the Planning and Public Information staff. This may be implemented as part of the Transportation Demand Management program. Steps include the following:

- 1. Determine likely interest for a car-sharing program for the southeast before investing effort to set up the program.
- Investigate the number of area residents who are likely to sign up (based on car ownership data or surveying neighborhood groups and other forums).
  - 1. Review the adequacy of alternative transportation options for everyday trips. Recent improvements to MTA bus routings should help.
- 2. Contact one or more car-sharing firms to gauge their interest in expanding to Baltimore. The firms currently operating in the Washington, D.C. area are a good place to start, as some Baltimore residents may already be members. Flexcar (<a href="www.riecar.com">www.riecar.com</a>) and Zipcar (<a href="www.zipcar.com">www.zipcar.com</a>) are two such companies.
- 3. Contact other cities that currently have car sharing about their various arrangements with car-sharing firms and their experiences. In some cities, car-sharing programs operate more like an incidental business, and in some, they are more like a concession (to the City or the transit authority).
- 4. Identify a dedicated "home" parking space for each shared car. It is important that the cars are in areas convenient to homes, businesses, and transit.
- The Parking Authority may contribute some spots in municipal garages.
- Private businesses with large lots, such as supermarkets, can increase foot traffic and gain goodwill by contributing a spot.
- 5. Finalize details with the selected company or companies. The City's legal staff may be needed to negotiate. Some questions:
- What rates will the company offer residents?
- What type of arrangement will be used? Will the City promote the company explicitly, or need to provide any guarantees?

If a car-sharing program proves successful, the Planning Department may want to explore codifying incentives (or even requirements) for provision of parking spaces for shared cars into permitting rules for large new developments.

# **B.2** Take the Initiative on Improving Transit

Although the City does not provide transit service in Baltimore, there are a number of actions the City can take to improve transit:

- Work with and encourage the MTA on its efforts to rationalize its existing services
- Work with businesses to provide shuttle services, as a component of a transportation demand management program
- Improve the on-street environment for transit

#### **Implementation**

BCDOT is the lead agency. Implementation steps include the following:

- 1. In accordance with the recommendation to *Strengthen Interagency Coordination & Decision-making*, ensure that the MTA and other transit providers have a voice in BCDOT decisions that affect transit.
- 2. Assist MTA service planning efforts by sharing available traffic/pedestrian data and brokering appropriate neighborhood and business contacts.
- 3. Consider the establishment of shuttle services in conjunction with a City-sponsored transportation demand management program or business-sponsored transportation management associations (see separate Fact Sheets). Possible routes could include a waterfront commuter boat as well as a shuttle on Broadway running between Johns Hopkins and Fells Point.
- 4. Traffic management actions to improve the on-street environment for transit include the following:
  - Reassess the placement and spacing of bus stops (see separate Fact Sheet)
  - Ensure that an adequate pedestrian environment exists near each bus stop. This includes sidewalks, opportunities for crossing the street and measures (such as closed circuit TV and/or call boxes) to ensure reasonable personal safety.
  - Enable surface vehicles to use transit signal priority.
  - Use the signal control system to implement gating strategies, which are designed to prevent unacceptable traffic congestion on major transit corridors.
- 5. Activities to improve transit service that involve construction include
  - Queue jumps, where the transit vehicle is given a short exclusive right-of-way at the approach to a congested intersection
  - Separate right-of-way.

# **B.2.a Reassess Bus Stop Placement**

While frequent bus stops reduce walking distances for bus passengers, and may make it easier for first time riders to find a stop, they have the following disadvantages:

- Slower bus service, due to the frequent stops. This is an inconvenience to the enroute passengers and raises the transit agency operating cost.
- It is more expensive to equip a large number of bus stops with enhancements, such as shelters, next-arrival reader boards, and security enhancements.
- A bus stop can result in the loss of up to four parking spaces.

Bus stop spacing typically ranges from 500 to 1200 feet in urban areas<sup>2</sup>

#### **Implementation**

The City and MTA collaborate to implement this action.

1. Obtain and examine stop usage numbers, and on-board numbers from the transit provider for the routes at the stop (see **Figure 2**)

Figure 2 Portion of MTA Route 10 with daily ons and offs

EASTERN AVE + BROADWAY	147	175	
EASTERN AVE + ANN ST	32	42	
EASTERN AVE + WOLFE ST	63	51	
EASTERN AVE + WASHINGTON ST	36	32	
EASTERN AVE + CHESTER ST	54	64	
EASTERN AVE + PATTERSON PARK A	89	51	
EASTERN AVE + MILTON AVE	13	24	
EASTERN AVE + LAKEWOOD AVE	3133	26	
EASTERN AVE + KENWOOD AVE	20	31	
EASTERN AVE + LINWOOD AVE	34	26	
EASTERN AVE + ELLWOOD AVE	15	36	
EASTERN AVE + EAST AVE	60	83	
EASTERN AVE + HIGHLAND AVE	50	139	
EASTERN AVE + CONKLING ST	54	115	

Evaluate special circumstances (if any) surrounding the stop

- Are there issues with turns, traffic congestion or traffic visibility?
- If the stop is removed, how far is an adjacent stop?
- Is the stop used by people with mobility impairments who may find it difficult to walk to an adjacent stop?
- Is the stop at an intersection that will have transit signal priority (because of the difficulty in predicting dwell times, transit signal priority is generally more effective with stops that are on the far side of an intersection).
- 3. Considering (1) and (2) evaluate the removal or relocation of stops along a corridor. Implement as appropriate.

<sup>&</sup>lt;sup>2</sup> http://gulliver.trb.org/publications/tcrp/tcrp\_rpt\_19-b.pdf

# C.1 Collect & Use Data More Intelligently

Systematically collect data on traffic volumes, crashes, street crime, road deficiencies, and parking that are relevant to motorists, pedestrians and cyclists. This enables a better understanding of the most significant safety and security issues, and can help to prioritize efforts given limited resources. The data can also be used to educate the public and to demonstrate progress.

#### **Implementation**

BCDOT is the lead agency, but PABC and the Police will also play major roles.

- 1. Identify data sources, which are likely to include:
  - Between 3 and 10 years of past automobile crash data (Police or State of Maryland)
  - Current automobile crash data (Police or State of Maryland)<sup>3</sup>
  - Street crime information (Police)
  - Relevant complaints on road conditions (e.g., poor sidewalk conditions, pot holes) (311 system)
  - Traffic volume information, from BCDOT and from traffic studies
- 2. Identify what specifically needs to be collected from each data source to make the data useful. For example, BCDOT will find it helpful that the database of crash data contains sufficient information to enable the automatic construction of crash diagrams.
- 3. Identify what additional data collection would be desirable, and perform such data collection. For example, a parking study may be appropriate in an area such as Fells Point. The following data should be collected either routinely, or through a special effort:
  - Automobile crash statistics
  - Street crime
  - Complaints on road conditions (from the 311 system)
  - Traffic volumes (near major developments, on roads being considered for a change in classification, or on roads where capacity is an issue).
  - Parking occupancy information (in areas where major changes are planned in either parking capacity or parking management).
- 4. Identify the most helpful way to present the data and to combine it with other information. For example, crashes could be entered in a geographic information system that also includes information on traffic volumes.
- 5. Dedicate resources to set up the initial data collection.
- 6. Identify and dedicate resources to keep the data up-to-date.

<sup>&</sup>lt;sup>3</sup> Although automobile crash data generally includes automobile/pedestrian and automobile/bicycle crashes, there are two major limitations in using this data for the non-motorized modes. First, the number of crashes involving pedestrians and cyclists is much lower than those involving only motorists, so much more data (perhaps 10 years worth) needs to be collected to identify trends. Second, it does not include those pedestrian and bicycle mishaps that do not involve an automobile.

# C.2 Create & Use a Street System Management Plan

A street system management plan will clearly articulate the intended function of each street. With a street system management plan, it becomes easier to set the expectations of residents and to create a transportation system that balances the needs of local and through users. Some streets are primarily intended to facilitate through traffic while others are intended for local access. Additional considerations could include pedestrian-orientation, transit-orientation, and truck routes. This way, the new classification system adds a dimension to the traditional system, which is based solely on traffic flow.

#### **Implementation**

The primary agency for this work is BCDOT.

Steps include the following:

- 1. Using the FHWA classifications as a starting point, create a street classification system. The full recommendations document contains references to classifications systems used in Portland, Oregon and the Province of Ontario.
- 2. Identify constraints on any Baltimore classification (e.g., national highway system requirements).
- 3. Review intended land uses, to ensure they are compatible with a proposed street classification. For example, a high-density land use will likely support transit, and is thus compatible with a transit-oriented street.
- 4. Set up clear criteria for classifications. This is particularly important for those classifications, such as truck routes, that may not be popular among residents. For truck routes, such criteria might include the following:
  - Connectivity of the route to major freight generators and receivers
  - Width of the streets involved
  - Extent to which the proposed route goes through residential or historic districts.
- 5. Inventory the current classification.
- 6. Inventory current/projected land uses.
- 7. Design a public process for review of classifications.
- 8. Based in the inventory, identify obvious disconnects (e.g., a local street with 10,000 cars / day).
- 9. Identify candidates for reclassification.
- 10. Use the criteria (step 4) and the public process (step 7) to make reclassification decisions for the candidate streets identified in step 9.

# **C.3** Develop Education & Outreach Tools

Education and outreach are critical components of continued strong relations between the City and its stakeholders – primarily, citizens and the business community. Instead of reinventing for each new transportation study or major initiatives, customized methods and materials can be easily developed to serve as a template and can minimize the effort needed to conduct outreach or communicate new policies or procedures to the public. As seen in the Southeast Study stakeholder participation, strong communication with stakeholders can improve the climate between agencies and stakeholders, and can help to achieve a well-received and successful result.

#### **Implementation**

BCDOT should lead this effort. Steps to implementation include:

- 1. Educate citizens on communication channels and the 311 system:
  - a. Continue to publicize the role of 311 system, and what it can and cannot address
  - b. Train internal staff to better communicate 311 criteria to the public
  - c. Enhance the database behind the 311 system to collect other feedback that has been collected elsewhere.
- 2. Create and use stakeholder management plans for major studies/projects to outline stakeholder participation activities and to minimize work to create a new plan for each activity.
  - a. Develop a routine stakeholder process to serve as a template to be applied to major studies/projects.
  - b. Refer to Volpe's Southeast Study Participation Plan (<a href="http://www.baltimorecity.gov/government/transportation/images/SEPartPlan10">http://www.baltimorecity.gov/government/transportation/images/SEPartPlan10</a> 2104.pdf) as an example.
- 3. Continue to publicize policies and standards.
  - a. Share information on new policies and standards (e.g., red light cameras and pothole procedures) both in hard copy and electronically.
  - b. Work with City Council members to have them share transportation information with their constituents. This is an efficient way of sharing information and enhances the working relationship with City Council.
- 4. Develop education and community programs that support Transportation Demand Management (TDM) initiatives.
  - a. Have TDM staff promote initiatives to neighborhood groups and businesses with the help of the Mayor's Office of Neighborhoods and BDC.
  - b. Create outreach materials on different TDM activities that can be adopted.
  - c. Educate public on the benefit and outcome of TDM activities.
- 5. Evaluate the effectiveness of outreach tools and methods in terms of reaching specific audiences with specific messages.

# C.4 Comprehensive Planning and Zoning

Comprehensive planning and zoning ordinances developed as part of the planning process play a crucial role in shaping future development. Comprehensive planning should integrate City-wide strategic objectives and community input into a vision for the future. This process should include modeling the transportation network to determine the outcomes of proposed development scenarios. Zoning should then be used to shape future developments towards the desired vision.

#### **Implementation**

The Planning Department is the primary agency for leading the comprehensive planning revision and writing new zoning. BCDOT, BDC and Parking will need to be involved with formulating strategies and ensuring that the plan integrates City-wide strategic objectives. The following activities are required in order to develop zoning that shapes development to meet the future vision of the city:

- 1. Assemble and implement the components of a City-wide planning strategy.
  - Articulate a common understanding of the City's development-related vision
  - Integrate key agencies' strategic objectives through facilitated interagency discussions
  - Use the travel demand model to understand the consequences of the 3-4 most likely development strategies and the secondary implications of policies
  - Factor in stakeholders' viewpoints of likely development strategies
  - Systematically evaluate planning tools such as
    - Limiting construction of off-street parking (i.e., instituting parking maximums)
    - Encouraging developments to separate parking costs from that of office/living space
    - o Matching land use and density to street uses as identified in the *street system management plan*. (i.e., increase density and reduce parking requirements along transit corridors) (see Fact Sheet on street system management plan)
    - o Using negotiated agreements to shape developments, particularly with regard to density and transportation demand management strategies.
    - o Requiring developments to incorporate components that support alternative transportation (e.g., bicycle parking, shower facilities, reserved parking for car sharing)
- 2. Use Volpe research and contact with other cities that currently use some of the strategies Baltimore is considering to find out how their programs work and the results they've experienced.
- 3. Develop zoning code that incorporates planning tools that support desired vision and objectives.
- 4. Encourage development that matches desired vision and determine how to work with developers to reshape their development concepts to support the City-wide strategic objectives.

# C.5.a Negotiated Agreements

Negotiated agreements formed during the development approval process can encourage more development decisions that support City goals, while providing developers with more flexibility in what they can build by allowing them to identify creative solutions to meet these City goals. They lead to a more proactive approach and optimal outcome than what can be done through traditional zoning. They can be required for any project that will noticeably impact the transportation network (e.g., development creating 100 or more trips per peak hour), or can be used to provide benefits to the developer above and beyond those that are standard, in exchange for benefits that the city might not otherwise obtain (e.g., a city allows additional density in exchange for providing open space or mixed-use developments or other benefits).

Baltimore's site design review process is a basic form of negotiated agreement, focusing particularly on how a development interfaces with the public right of way and on-site circulation.

#### **Implementation**

BCDOT is the lead agency for developing guidance on developers' responsibility for their transportation impacts. In order to use negotiated agreements to manage parking and travel demand, while supporting development, Baltimore would need to:

- 1. Develop a framework for use of negotiated agreements based on:
  - Understanding of current roadway use via traffic counts and modeling
  - Defining "acceptable" travel conditions *in coordination with the street system management plan* (see relevant Fact Sheet).
  - Understanding of traffic impacts of build-out of existing zoning *via modeling*
  - Defining those regions (mitigation zones) of the city that are most sensitive to the traffic impacts of new development, because roads are already nearing capacity.
  - Identifying what desired outcomes from a negotiated agreement program would be (e.g., higher density with less auto travel, developments paying for increased infrastructure capacity, or less parking being built) as a part of integrating strategic objectives among agencies.
- 2. Determine what incentives, if any should be provided, and implement the necessary changes to the zoning ordinance (Planning and BCDOT).
- 3. Implement negotiated agreement program
  - a. Ensure that the proposed development meets non-traffic objectives before granting initial approval (Planning).
  - b. Rewrite zoning to address the desired outcomes *in coordination with comprehensive planning and zoning to better integrate strategic objectives among agencies.* Include requirements for traffic impact studies.
  - c. Engage in negotiation with developers as required by zoning.
    - Understand traffic generated by new developments (traffic impact studies)
    - Identify potential mitigations appropriate for each development.
- 4. Monitor development to ensure compliance with the agreement and monitor the traffic impacts and mitigations under the plan.

# **C.5.b Development Impact Fees**

Development impact fees will ensure that infrastructure development occurs simultaneously with commercial development and places the financial burden for the infrastructure on the developments that benefit from it. Development impact fees are one-time fees designed to offset the cost of infrastructure required to serve new developments, preserving scarce resources for maintaining existing infrastructure.

#### **Implementation**

The primary agency for this work is BCDOT, specifically the Engineering and Construction staff. Cooperation from BDC and others will be necessary for development impact fees to gain public acceptance. Steps include the following:

- 1. Define minimum level of service (LOS) standard for roadway facilities *in conjunction* with street system management plan (BCDOT Traffic Div.), as well as the region (mitigation zone) where developers should bear increased responsibility for mitigation. In the Southeast, such a region could include both Fells Point and Canton.
- 2. Determine transportation impacts of development *via modeling*. The development scenario used to set impact fees should be described by the *comprehensive plan*.
- 3. BCDOT Construction and Engineering should take the lead in preparing a list (including cost estimates) of needed improvement projects. This activity should be done as a part of *integrating strategic objectives among agencies*.
- 4. Incorporate expansion projects into the larger Capital Improvement Program.
- 5. Calculate the fee based on the costs of the expansion projects and the amount of development expected. Fees do not typically cover the entire cost of expansion projects and must pass political and legal tests.
- 6. Describe the nexus between development, the fee, and the projects. The legality of development impact fees has been challenged throughout the country. See legal counsel to ensure that the program adheres to state law. 4
- 7. Set administration and review procedures. Things to consider include:
- How the fee will be administered (based on traffic impact studies or by development size; through the "Permit Counter" or in conjunction with/parallel to site plan review)
- Whether there are alternatives to paying the fee (i.e. the developer builds infrastructure equivalent to the fee being assessed or implements TDM strategies to reduce the traffic generated in order to lower the fee)
- How the money will be managed and what happens if it is not spent
- An appeal process

8. Have impact fee procedures approved by the *City* to begin implementation. Legislation will need to be passed to authorize the impact fee program. Once the program is in place, staff must be available to manage the process.

<sup>&</sup>lt;sup>4</sup> Impact fees are regulated by Article 66B, §10.01, which was updated by the Maryland Economic Growth, Resource Protection, and Planning Act of 1992. Guidance can be found in *Maryland's Models and Guidelines Vol. 14-Adequate Public Facilities*, published by Maryland Office of Planning, June, 1996. http://www.mdp.state.md.us/info/download/Mmg14.PDF

# C.6 Interagency Coordination and Decision-making

Strengthened interagency coordination and decision-making among agencies will help to streamline strategic and budgetary decisions and improve communication among agencies. Mechanisms at both the executive and staff levels are essential. This will keep all agencies informed of related projects being led by others, and will help to encourage a system-wide approach to managing an effective transportation system for the southeast.

## **Implementation**

BCDOT should lead this effort to improve coordination among the City's agencies, as it relates to transportation. Invited agencies (Planning, Police, Parking, BDC, MTA, etc.) should recognize this as an opportunity to improve the way of doing business.

The following actions can be taken to achieve this:

- Re-establish working groups with other City/State departments.
  - a. Lead off with executive-level discussions and agreements on outcomes
  - b. Determine a key contact at each agency to set up and maintain logistics of organizing and hosting the meetings, and documenting the resulting action items.
  - c. Schedule working groups on a regular basis (monthly or quarterly depending on the coordination needed).
  - d. Create a progress report to share with each agency for each working group meeting that updates the status of projects or funding.
- Increase the use of the current Economic Development Group (EDG) as a forum to gather support for transportation projects or strategies.
  - e. Present specific projects to the EDG for feedback or to inform them of status
  - f. Use the EDG to discuss strategic and budgetary decisions
- Integrate strategic objectives and investment plans related to transportation.
  - g. Work with the Planning Office to share strategic goals and assign responsibility for addressing goals
  - h. Share objectives and plan with EDG to collect support or address comments.